

Correspondence

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TO THE EDITOR, *Genitourinary Medicine*

Symptomless gonorrhoea in women in Maiduguri (north eastern Nigeria)

Sir,

One of the important reasons for the continued rising incidence of gonorrhoea is the difficulty of identifying and treating women with the disease who are symptomless. As a result of that, the infected women, particularly those in the developing world, fail to seek medical attention and continue to serve as a reservoir of gonococcal infection for others, and themselves are at risk for complications of the disease. Review of relevant published reports clearly suggests a high incidence of symptomless gonorrhoea in African women. Hopcroft *et al* found 18% of 200 women attending a family planning clinic in Kenya had gonorrhoea,¹ and Nasah *et al* in Cameroun (west Africa) found that 15% of 1326 women attending maternity or child health centres had gonorrhoea.² In a study carried out at Ibadan (western Nigeria), Onifade and Osoba reported gonorrhoea in 2.05% of patients attending gynaecological clinics and in 5.2% of those attending antenatal clinics. The present study was undertaken to assess the prevalence of symptomless gonorrhoea in Maiduguri, capital of Borno State (north eastern Nigeria), where no such data are available, and polygamy is much more common than in Ibadan.

A total of 120 women attending the gynaecology clinic at the General Hospital, Maiduguri were examined for gonorrhoea by smears and cultures of material from the urethra and endocervix. The smears were stained by Gram's method for intracellular Gram negative diplococci, and the primary cultures were made on Thayer-Martin agar in a candle jar at 37°C. *Neisseria gonorrhoeae* isolates were identified by their characteristic morphology, oxidase activity, and carbohydrate fermentation reactions. Of the 120 women examined, 18 (15%) were infected with *N gonorrhoeae*. Although these findings are comparable with those reported by Hopcroft *et al* from Kenya¹ and Nasah *et al* from Cameroun,² they are substantially higher than those of Onifade and Osoba from western Nigeria.³

This higher incidence of symptomless gonorrhoea in a cross section of the population under study may reflect an upward surge in the prevalence of gonorrhoea in Nigeria during the past five years (1982-7). Furthermore, it clearly suggests that there is a considerable reservoir of gonococci in the female population in Maiduguri, north eastern Nigeria. The incidence reported may possibly be related to an increase in promiscuity in general or to the socially accepted practice of polygamy, which might promote the spread of gonococcal infection. In conclusion, the lack of awareness of the presence of gonococcal infection in women contributes to the perpetuation and spread of the disease, and failure to seek treatment at an early stage leads to serious consequences later. In view of the above observations, routine testing for gonococcal infection should be considered an essential part of prenatal care.

Yours faithfully,

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References

- 1 Hopcroft M, Verhagen AR, Ngigi S, Haya ACA. Genital infections in developing countries. Experience in a family planning clinic. *Bull WHO* 1973;49:587-95.
- 2 Nasah BT, Ngumatcha R, Eyong M, Godwin S. Gonorrhea, Trichomonas and Candida among gravid and non-gravid women in Cameroun. *Int J Gynaecol Obstet* 1980; 18:48-52.
- 3 Onifade A, Osoba AO. Screening for sexually transmitted diseases in gynaecological and prenatal clinic in Ibadan, Nigeria. *Nigerian Quarterly Journal of Hospital Medicine* 1982; 1:15-20.

TO THE EDITOR, *Genitourinary Medicine*

Chlamydiae infect the placenta less often than gonococci

Sir,

Several years ago we reported common prepartal infection of the placenta by *Neis-*

seria gonorrhoeae in Gabonese women.¹ It could be a source of infection in ophthalmia neonatorum caused by *N gonorrhoeae* after caesarian section or *N gonorrhoeae* amnionitis, although ascending infection after prolonged rupture of membranes was usually cited as the probable mechanism.^{1,2} Similarly, *Chlamydia trachomatis* may be isolated from babies with ophthalmia neonatorum after caesarian section.³⁻⁷ Chlamydial antigens were detected in three placentas by immunofluorescence using polyclonal sera, but not by culture in one study of 24 placentas,⁸ or in another of 68 placentas.⁹ One case of intrauterine infection with *C trachomatis* has been reported.¹⁰ The usual incubation period for chlamydial ophthalmia neonatorum is at least three to five days. Earlier infections, at birth or starting on days 1 to 3, have been ascribed to prolonged rupture of membranes, higher infecting doses, or prepartal infections.¹¹⁻¹³

We have examined 63 placentas by culture and immunofluorescent staining for *C trachomatis*, and failed to find evidence of chlamydial infection. Culture and immunofluorescence (Micro Trak, Syva Biomerieux, France) for *C trachomatis* and culture for *N gonorrhoeae* were performed on cervical samples taken two or three days after delivery and placental scrapings taken less than an hour after delivery at Franceville Provincial Hospital.^{11,13,14} Histopathological sections of placental tissue and membranes were stained with monoclonal antibodies to *C trachomatis* and stained with immunoperoxidase (Cultureset, Ortho Diagnostics).

C trachomatis could be detected in cervical samples from six of the women and *N gonorrhoeae* in three. From the placentas, neither culture, nor immunofluorescence, nor histopathological sections stained by immunoperoxidase were positive for *C trachomatis*. *N gonorrhoeae* was cultured from the placenta of one woman. In our previous study we reported culture of *N gonorrhoeae* from three placentas of five infected women in a cohort of 192.¹ Thus, we found *N gonorrhoeae* in the placentas of four of eight infected women, but *C trachomatis* could not be identified in the placenta of any of six women infected with *C trachomatis* or in any of the other 57 women.

Babies with ophthalmia neonatorum after

caesarian section must have been contaminated by an ascending infection either before or after the rupture of the placental membranes, or alternatively, by contamination after birth. In a separate study (Goeman J, *et al*, unpublished observation) of 205 infants with ophthalmia neonatorum, only one out of 38 with chlamydial ophthalmia neonatorum was delivered by caesarian section whereas four of 19 *N gonorrhoeae* positive babies with ophthalmia neonatorum and 22 of 148 with non-chlamydial, non-gonococcal ophthalmia neonatorum were delivered by caesarian section. Thus chlamydial ophthalmia neonatorum was observed in 4% of babies with ophthalmia neonatorum delivered by caesarian section and 26% of those delivered vaginally.

Although our study size was too small to rule out the possibility of prepartal infection of the placenta by chlamydiae, it must be less common than gonococcal infection of the placenta.

Yours faithfully,
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References

- Yvert F, Frost E, Walter P, Gass R, Ivanoff B. Prepartal infection of the placenta with *Neisseria gonorrhoeae*. *Genitourin Med* 1985; **61**:103-5.
- Lacey CJN, Milne JD. Preterm labour in association with *Neisseria gonorrhoeae*. *British Journal of Venereal Diseases* 1984; **60**:123-4.
- Givner LB, Rennels MB, Woodward CL, Huang SW. *Chlamydia trachomatis* infection in infant delivered by caesarian section. *Pediatrics* 1981; **68**:420-1.
- Hammerschlag MR, Anderka M, Semine DZ, McComb D, McCormack WM. Prospective study of maternal and infantile infection with *Chlamydia trachomatis*. *Pediatrics* 1979; **64**:142-8.
- Rees E, Tait AI, Hobson D, Johnston FWA. Perinatal chlamydial infection. In: Hobson D, Holmes KK, eds. *Nongonococcal urethritis and related infections*. Washington DC: American Society for Microbiology, 1977: 140-7.
- Hansman D. Inclusion conjunctivitis. *Med J Aust* 1969; **1**:151-3.
- Barry WC, Teare EL, Uttley AHC, *et al*. *Chlamydia trachomatis* as a cause of neonatal conjunctivitis. *Arch Dis Child* 1986; **61**:797-9.
- Wilt JC, Wilt PC, Kordova N, Martin C. The human placenta as a possible reservoir of

chlamydial infection in northern Canada. *Can J Public Health* 1976; **67**:114-6.

- Pankuch GA, Appelbaum PC, Lorenz RP, Botti JJ, Schachter J, Naeve RL. Placental microbiology and histology and the pathogenesis of chorioamnionitis. *Obstet Gynecol* 1984; **64**:802-6.
- Mårdh P-A, Johansson PJ, Svenningsen N. Intrauterine lung infection with *Chlamydia trachomatis* in a premature infant. *Acta Paediatr Scand* 1984; **73**:569-72.
- Schachter J. Chlamydial infections. *N Engl J Med* 1978; **298**:540-9.
- Armstrong JH, Zacarias F, Rein MF. Ophthalmia neonatorum: a chart review. *Pediatrics* 1976; **57**:884-92.
- Frost E, Yvert F, Zué Ndong J, Ivanoff B. Ophthalmia neonatorum in a semi-rural African community. *Trans R Soc Trop Med Hyg* 1987; **81**:378-80.
- Leclerc A, Frost E, Collet M, Goeman J, Bedjabaga L. Urogenital *Chlamydia trachomatis* in Gabon: an unrecognised epidemic. *Genitourin Med* 1988; **64**:308-11.

TO THE EDITOR, *Genitourinary Medicine*

Genital herpes

Sir,
The number of cases of genital herpes nationally has increased. Returns to the DHSS showed 7327 cases in 1977¹ and 11 147 in 1981,² and other sexually transmitted viral diseases have also increased during the past decade.

Herpes genitalis is a disease characterised by recurrences, so to assess the relative contribution made to this increasing total by first attacks of herpes and by recurrences, we reviewed the notes of patients attending the department of genitourinary medicine in Leicester with herpes during the same six month periods in 1982 and 1987 (table). As expected, the total cases of herpes increased during those years (90 cases in 1982, 134 cases in 1987). Separating the episodes into first attacks and recurrences shows that there was a modest increase in first attacks (63 increasing to 72), whereas recurrences doubled; the largest increase being in men (12 increasing to 41).

These figures show the expected increase in recurrences as the number of infected people increases with time. With the increasing pool of infection, the number of uninfected people at risk will also increase (as long as the size of the pool is small compared with the population at risk, which it is). Assuming continued sexual activity, therefore, the number of first attacks will increase.

It is interesting that the number of first attacks in men actually decreased, but recurrences showed a threefold increase,

Table Incidence of genital herpes in Leicester in two six month periods

	1982	1987
Men:		
First attack	34	29
Recurrences	12	41
Total	46	70
Women:		
First attack	29	43
Recurrences	15	21
Total	44	64
Both:		
First attack	63	72
Recurrences	27	62
Total	90	134

whereas recurrences in women showed little increase during the study period.

Yours faithfully,
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References

- Anonymous. Sexually transmitted diseases. Extract from the annual report of the CMO of the DHSS for 1977. *British Journal of Venereal Diseases* 1979; **55**:225-9.
- Anonymous. Sexually transmitted diseases. Extract from the annual report of the CMO of the DHSS for 1981. *British Journal of Venereal Diseases* 1984; **60**:199-203.